

## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria. Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,864	11/19/2001	Cheng-Ku Chen	67,200-600	4851
7590 07/07/2004		EXAMINER		
TUNG & ASSOCIATES			PHAM, LONG	
Suite 120 838 W. Long Lake Road			ART UNIT	PAPER NUMBER
Bloomfield Hills, MI 48302			2814	
		DATE MAILED: 07/07/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

			Application No. Applicant(s)				
Office Action Summary		09/996,864	CHEN ET AL	CHEN ET AL.			
		Examiner	Art Unit	m			
		Long Pham	2814	n <sup>-</sup>			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
THE I - Exter after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATION asions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, it period for reply is specified above, the maximum statutory perion to reply within the set or extended period for reply will, by steply received by the Office later than three months after the read patent term adjustment. See 37 CFR 1.704(b).	ON.  R 1.136(a). In no event, hown.  a reply within the statutory migrical apply and will expire tatute, cause the application.	ever, may a reply be timely filed  nimum of thirty (30) days will be considered  SIX (6) MONTHS from the mailing date of to become ABANDONED (35 U.S.C. § 133	this communication.			
Status							
1)	Responsive to communication(s) filed on _	·	•				
2a) <u></u> ☐	This action is <b>FINAL</b> . 2b)⊠	This action is non-fin	al.				
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
•	4)⊠ Claim(s) <u>1,3-17,19 and 20</u> is/are pending in the application.  4a) Of the above claim(s) <u>8-16</u> is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
6)⊠	Claim(s) <u>1, 3-7, 17, 19-20</u> is/are rejected.						
7)	Claim(s) is/are objected to.						
8)□	Claim(s) are subject to restriction a	nd/or election require	ement.				
Applicati	on Papers						
9)□	The specification is objected to by the Exar	miner.					
10)🖂	10)⊠ The drawing(s) filed on <u>17 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	ınder 35 U.S.C. § 119						
	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docum	nents have been rec	eived.				
	<ul><li>2. Certified copies of the priority docum</li><li>3. Copies of the certified copies of the</li></ul>	priority documents h	ave been received in this Natio				
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
			•				
Attachmen							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date							
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6) Uther:							

Application/Control Number: 09/996,864 Page 2

Art Unit: 2814

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 3, and 4-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Aminpur et al. (US '726).

With respect to claim 1, Aminpur et al. teaches a semiconductor device where during fabrication the semiconductor device comprises:

a primary layer 515 having a desired or specification or design dimension, fig. 5;

a lower layer 540 over the primary layer, fig. 5;

an upper layer 550 over the lower layer, the upper layer having a highetching selectivity as compared to the lower layer and the upper layer and lower layer have substantially identical width, fig.5 and col. 6, lines 53-55; and

an etching-stop layer 510 between the lower layer and primary layer, fig. 8 and associated text (that is during the formation of the gate 815).

Note that the process limitations in device claim 1 are given no weight in the patentability determination unless they produce some structural or material differences.

Application/Control Number: 09/996,864 Page 3

Art Unit: 2814

With respect to claim 3, Aminpur et al. further teach the primary layer comprises of a polysilicon layer. See col. 5, lines 10-15.

With respect to claims 4-7, Aminpur et al. further teach the lower and upper layers are made of Si<sub>3</sub>N<sub>4</sub>, SiON, or SiO<sub>2</sub>. See col. 5, lines 40-50.

3. Claims 17, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Aminpur et al. (US '726).

With respect to claim 17, Aminpur et al. teaches a semiconductor device comprises:

a primary layer 515 having a desired or specification or design dimension, fig. 5;

a lower layer 540 over the primary layer, fig. 5;

an upper layer 550 over the lower layer, the upper layer having a highetching selectivity as compared to the lower layer and the upper layer and lower layer have substantially identical width, fig.5 and col. 6, lines 53-55; and

an etching-stop layer 510 between the lower layer and primary layer, fig. 8 and associated text (that is during the formation of the gate 815).

Note that the process limitations in device claim 17 are given no weight in the patentability determination unless they produce some structural or material differences.

With respect to claims 19-20, Aminpur et al. further teach the lower and upper layers are made of Si<sub>3</sub>N<sub>4</sub>, SiON, or SiO<sub>2</sub>. See col. 5, lines 40-50.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Long Pham whose telephone number is 571-272-1714. The examiner can normally be reached on M-F, 7:30AM-3:00PM.

Application/Control Number: 09/996,864 Page 4

Art Unit: 2814

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Łong Pham

Primary Examiner

Art Unit 2814